

AMENDMENTS TO THE CLAIMS

1-15 (*cancelled*)

16. (*original*) A magnesium-zirconium master alloy containing dissolved zirconium and zirconium particles in the substantial absence of halide inclusions, wherein 90% of the zirconium particles are sized less than 5µm.

17. (*previously presented*) A magnesium-zirconium master alloy as claimed in claim 15 wherein 90% of the zirconium particles are sized less than 3 µm.

18. (*cancelled*)

19. (*currently amended*) A method of adding zirconium as an alloying element to molten magnesium/magnesium alloy, the method comprising mixing a magnesium-zirconium master alloy as claimed in claim [12] **16** with the molten magnesium/magnesium alloy.

20. (*currently amended*) A magnesium alloy containing zirconium prepared by a method as claimed in claim [18] **19**.

21. (*new*) A magnesium-zirconium master alloy as claimed in claim 16 containing 10-50% by weight zirconium.

22. *(new)* A magnesium-zirconium master alloy as claimed in claim 16 containing 20-40% by weight zirconium.

23. *(new)* A magnesium-zirconium master alloy as claimed in claim 16 prepared by a method comprising the steps of:

- (a) mixing (i) zirconium sponge comprising an agglomerate of zirconium particles and having a surface layer containing fluorine containing compounds at least partially coating at least some of the particles with (ii) molten magnesium/magnesium alloy to form a magnesium-zirconium melt containing dissolved zirconium and zirconium particles; and
- (b) casting the magnesium-zirconium melt to solidify as the magnesium-zirconium master alloy.

24. *(new)* A magnesium-zirconium master alloy as claimed in claim 23 wherein fluorine containing compounds are zirconium fluoride compounds.

25. *(new)* A magnesium-zirconium master alloy as claimed in claim 24 wherein the zirconium fluoride compounds have the formula $Zr_xF_y \cdot nH_2O$ and x, y and n are integers.